

AMENDMENTS TO THE CLAIMS

The following listing of claims replaces all previous listings and versions of claim in this application.

Claims 1. to 22. (Cancelled)

23. (Currently Amended) A method for operating a ~~protein-containing~~ food product dispenser comprising:

dispensing servings of a ~~protein-containing~~ food or food component from a food delivery mechanism along a dispensing path;

directing a cleansing fluid along a cleansing fluid path which is ~~operably associated in fluid association~~ with the food delivery mechanism to conduct a cleansing operation on at least a portion of the dispensing path; and

rinsing the at least a portion of the dispensing path after the cleansing operation to remove cleaning fluid therefrom;

directing a sanitizing fluid to the at least a portion of the dispensing path to conduct a sanitizing operation, wherein the sanitizing operation occurs independently of the cleansing operation and rinsing for sanitizing the at least a portion of the dispensing path; and

switching between the dispensing of the food or food component and conducting the cleansing and sanitizing operations at a plurality of time intervals during a day automatically according to a time-controlled cleansing program;

wherein a cleansing fluid consisting of hot water at temperature above about 75°C is directed along the cleansing fluid path at a velocity between about 0.2 to 2.0 m/s to cause flow along the fluid path and to sanitize a portion of the fluid path, and wherein the fluid is directed at intervals occurring once about every ten minutes to about every 12 hours and with the interval including a fluid directing time period of between about 30 seconds to 30 minutes during which period the dispensing of the food product is interrupted.

Claims 24. to 28. (Cancelled)

29. (Currently Amended) The method of claim 23, wherein the ~~a first~~ cleansing sanitizing operation is conducted ~~at a first interval~~ a plurality of times before ~~the a second, different, cleansing operation is conducted at a second interval.~~

30. (Original) The method of claim 23, further comprising heating the cleansing fluid in the fluid path.

31. (Currently Amended) The method of claim 23, further including automatically determining with a controller device when one of the a cleansing and sanitizing operations will begin and sending one of a cleansing start signal and a sanitizing start signal ~~to initiate the cleansing operation.~~

32. (Currently Amended) The method of claim 31, wherein the cleansing start signal automatically starts a the cleansing operation and wherein the sanitizing start signal automatically starts the sanitizing operation.

33. (Withdrawn - Currently Amended) The method of claim 31, wherein the cleansing start signal notifies an operator to activate ~~a~~ the cleansing operation.

34. (Previously Presented) The method of claim 31, wherein the dispenser includes a source of cleansing fluid so that it is not necessary to connect an external source of cleansing fluid to perform the cleansing operation.

35. (Currently Amended) The method of claim 23, conducted by a controller in a food product dispenser comprising the food delivery mechanism, which mechanism comprises:
a food source configured for receiving ~~a protein-containing~~ food or food component,
a food conduit associated with the food source for receiving the food or food component therefrom, and
a dispensing mechanism configured for dispensing servings of the food or food component from the conduit along the dispensing path; and

the dispenser includes a first cleansing mechanism comprising a cleansing conduit in-fluid-association operably associated with the food delivery mechanism for directing a the cleansing fluid along the cleansing fluid path in cleansing association with the food delivery mechanism under conditions for performing a the cleansing operation on at least a portion of the dispensing path;

wherein the controller is operably associated with the first cleansing mechanism for activating the first cleansing mechanism at the intervals to cleanse the portion of the dispensing path automatically in response to predetermined conditions, and the controller, delivery mechanism and first cleansing mechanism are configured to switch between the dispensing of the servings and the cleansing operation.

36. (Previously Presented) The method of claim 35, which further comprises configuring the first cleansing mechanism for conducting the cleansing operation without interrupting delivery of the product.

37. (Currently Amended) The method of claim 36, which further comprises providing the cleansing operation with a duration that is selected to interrupt the dispenser for between about 10 and about 20 minutes.

38. (Withdrawn - Previously Presented) The method of claim 35, which further comprises providing the dispenser further with an operator annunciator, wherein the controller is operably associated with the annunciator to cause the annunciator to prompt an operator to activate the cleansing operation.

39. (Previously Presented) The method of claim 35, which further comprises providing the dispenser with at least one of a timer and a sensor, the timer configured for timing intervals between cleansing operations, wherein the controller is associated with at least one of the timer and the sensor for activating the first cleansing mechanism based on information received from at least one of the timer and the sensor.

40. (Cancelled)

41. (Cancelled)

42. (Currently Amended) The method of claim 35, which further comprises configuring the first cleansing mechanism for performing the cleansing and sanitizing operations ~~first and second cleansing operations that are different from each other.~~

43. (Currently Amended) The method of claim 42, which further comprises configuring the controller for automatically operating the first cleansing mechanism for selectively conducting one of the cleansing and sanitizing operations ~~first or second cleansing operation.~~

44. (Cancelled).

45. (Cancelled).

46. (Currently Amended) The method of claim 43, which further comprises configuring the controller is to conduct the first cleansing sanitizing operation several times per day.

47. (Currently Amended) The method of claim 46, which further comprises configuring the first cleansing mechanism to conduct the first cleansing operation using a cleansing fluid selected from at least one of the group consisting of including at least one of (i) a detergent, (ii) a caustic material, and (iii) an acid material, and the second cleansing sanitizing operation using hot water.

48. (Currently Amended) The method of claim 35, which further comprises configuring the dispenser to dispense product servings of [[up]] a single serving to about 10 servings at one time wherein each product serving is sized for consumption by an individual.

49. (Cancelled)

50. (Previously Presented) The method of claim 35, which further comprises configuring the first cleansing mechanism for recirculating the cleansing fluid through the cleansing fluid path.

51. (Previously Presented) The method of claim 50, which further comprises providing the dispenser with a heating device configured to heat the cleansing fluid as the cleansing fluid is recirculated through the cleansing fluid path.

52. (Previously Presented) The method of claim 50, which further comprises providing the first cleansing mechanism with a reservoir in fluid communication with the cleansing fluid path configured to hold a volume of the cleansing fluid.

53. (Previously Presented) The method of claim 35, which further comprises configuring the controller to activate the first cleansing mechanism at predetermined intervals for sanitizing a portion of the delivery mechanism.

54. (Currently Amended) The method of claim 35, which further comprises providing a dispenser housing that houses the food source, food conduit, dispensing mechanism and first cleansing mechanism.

55. (Previously Presented) The method of claim 53, wherein the dispenser includes a source of food product and a source of cleansing fluid so that it is unnecessary for an operator to connect an external source of food product or cleansing solution to perform a dispensing or cleansing operation.

56. (Currently Amended) The method of claim 35, wherein the first cleansing mechanism is operably associated ~~in fluid association~~ with the food conduit and dispensing path and is configured to cleanse the food conduit and dispensing mechanism.

57. (Currently Amended) The method of claim 23, wherein the ~~protein-containing~~ food product is a milk-based product and the sanitizing fluid is hot water having has a temperature of between about 75°C and about 95°C.

58. (Currently Amended) A method for operating a ~~protein-containing food~~ product such as ~~milk-based liquid food~~ product dispenser comprising:

dispensing ~~servings of a protein-containing food or food component~~ from a food delivery mechanism along a dispensing path;

conducting a cleansing operation on at least a portion of the dispensing path by directing ~~first and second~~ a cleansing fluids ~~separately~~ along a cleansing fluid path which is operatively associated with the food delivery mechanism and dispensing path; and

conducting a sanitizing operation by directing a sanitizing fluid along the at least a portion of the dispensing path, wherein the sanitizing fluid is at a temperature which is sufficient to sanitize the at least a portion of the dispensing path that has encountered a milk based product; and

switching between the dispensing of the food or food component and the conducting the cleansing operation at a plurality of intervals during a day ~~without substantial intervention of an operator~~ and automatically according to a time controlled cleansing program or upon request of an operator,;

~~wherein a first cleansing fluid is directed along the fluid path to de-soil the fluid path, and wherein a second cleansing fluid comprising hot water is directed along the fluid path at temperature and time intervals and duration conditions effective to sanitize a portion of the fluid path and maintain hygienic dispensing conditions therein.~~

59. (Currently Amended) The method of claim 58, wherein the ~~protein-containing~~ food product is a milk-based product and the sanitizing fluid is hot water having has a temperature of between about 75°C about and 95°C.

60. (Currently Amended) The method of claim 58, wherein the hot water ~~second~~ cleansing fluid ~~consists of hot water at~~ has a temperature above about 70 75°C and is directed

along the fluid path at a velocity between about 0.2 to 2.0 m/s to cause flow along the fluid path and to sanitize ~~the at least a portion of the dispensing path the fluid path portion.~~

61. (Currently Amended) The method of claim 60, wherein the hot water fluid is directed at intervals occurring once about every 10 ~~ten~~ minutes to about every 12 hours and with the interval including a fluid directing time period of between about 30 seconds and about ~~to~~ 30 minutes during which period the dispensing of the food product is interrupted.

62. (New) A method for operating a food product dispenser comprising:
dispensing servings of a food or food component from a food delivery mechanism along a dispensing path;
directing a cleansing fluid along a cleansing fluid path which is operably associated with the food delivery mechanism to conduct a first cleansing operation on at least a portion of the dispensing path;
directing cleansing fluid along a cleansing fluid path which is operably associated with the food delivery mechanism to conduct a second cleansing operation on the at least a portion of the dispensing path, wherein the second cleansing operation occurs a period of time after the first cleansing operation;
rinsing ~~the~~ at least a portion of the dispensing path to remove cleansing fluid therefrom;
directing sanitizing fluid to at least a portion of the dispensing path to conduct at least one sanitizing operation during the period of time between the first and second cleansing operations; and
switching between the dispensing of the food or food component and conducting the cleansing and sanitizing operations at a plurality of time intervals.

63. (New) The method of claim 62, wherein the sanitizing fluid is hot water.

64. (New) A method for operating a food product dispenser comprising:
dispensing servings of a food or food component from a food delivery mechanism along a dispensing path;

directing a cleansing fluid along a cleansing fluid path which is operably associated with the food delivery mechanism to conduct a cleansing operation on the at least a portion of the dispensing path, wherein at least a component of the cleansing fluid is stored in a container within the dispenser;

directing a sanitizing fluid to at least a portion of the dispensing path to conduct a sanitizing operation; and

switching between the dispensing of the food or food component and conducting the cleansing and sanitizing operations at a plurality of time intervals.